

AMENDMENTS TO THE CLAIMS

Claims 1-44 (Canceled).

45. (Currently Amended) ~~The plant as claimed in claim~~  
~~44~~, A plant for producing logs of web material, comprising  
in combination at least:

- a winder which receives at least one web material and  
produces large diameter reels by winding said web material  
around winding mandrels;

- at least one unwinder which unwinds said large  
diameter reels to provide unwound web material and which  
feeds the unwound web material to a converting line;

- a plurality of carriages which transfer said large  
diameter reels with said mandrels from a loading station to  
said at least one unwinder, sustain said reels in the at  
least one unwinder during unwinding and convey the mandrels  
following unwinding to a predetermined area; and

- a transfer device for transferring the reels with  
said mandrels from the winder to said carriages,

wherein said transfer device comprises a conveyor  
running between said winder and said loading station, and

wherein said conveyor comprises a conveying guide for  
said reels.

46. (Previously Presented) The plant as claimed in claim 45, wherein said conveying guide supports the reels via protruding ends of the winding mandrels.

47. (Currently Amended) ~~The plant as claimed in claim 44,~~ A plant for producing logs of web material, comprising in combination at least:

- a winder which receives at least one web material and produces large diameter reels by winding said web material around winding mandrels;

- at least one unwinder which unwinds said large diameter reels to provide unwound web material and which feeds the unwound web material to a converting line;

- a plurality of carriages which transfer said large diameter reels with said mandrels from a loading station to said at least one unwinder, sustain said reels in the at least one unwinder during unwinding and convey the mandrels following unwinding to a predetermined area; and

- a transfer device for transferring the reels with said mandrels from the winder to said carriages,

wherein said transfer device comprises a conveyor running between said winder and said loading station, and

wherein said conveyor comprises moving parts which are positionable in a retracted position for inlet and outlet of

the carriages to and from said loading station, and in an active position which permits transfer of the reels to said carriages positioned in the loading station.

48. (Previously Presented) The plant as claimed in claim 45, wherein said conveyor further comprises moving parts which are positionable in a retracted position for inlet and outlet of the carriages to and from said loading station, and in an active position which permits transfer of the reels to carriages positioned in the loading station.

49. (Previously Presented) The plant as claimed in claim 46, wherein said conveyor further comprises moving parts which are positionable in a retracted position for inlet and outlet of the carriages to and from said loading station, and in an active position which permits transfer of the reels to said carriages positioned in the loading station.

50. (Currently Amended) ~~The plant as claimed in claim 42, 43 or 44, further comprising~~ A plant for producing logs of web material, comprising in combination at least:

- a winder which receives at least one web material and produces large diameter reels by winding said web material around winding mandrels;

- at least one unwinder which unwinds said large

diameter reels to provide unwound web material and which feeds the unwound web material to a converting line;

- a plurality of carriages which transfer said large diameter reels with said mandrels from a loading station to said at least one unwinder, sustain said reels in the at least one unwinder during unwinding and convey the mandrels following unwinding to a predetermined area; and

- a continuous paper machine for producing said web material, said web material including at least one ply of paper, said continuous paper machine being arranged in relation to said winder to feed said web material from said continuous paper machine to said winder.

51. (Canceled).

52. (Currently Amended) ~~The plant as claimed in claim 51,~~ A plant for producing logs of web material, comprising in combination at least:

- a winder which receives at least one web material and produces large diameter reels by winding said web material around winding mandrels;

- at least one unwinder which unwinds said large diameter reels to provide unwound web material and which feeds the unwound web material to a converting line;

- a plurality of carriages which transfer said large

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diameter reels with said mandrels from a loading station to said at least one unwinder, sustain said reels in the at least one unwinder during unwinding and convey the mandrels following unwinding to a predetermined area,

wherein said unwinder comprises two stations for two of said carriages, and

wherein between the loading station and the unwinder a mechanism is present which is constructed and arranged to rotate said carriages approximately 180° around a substantially vertical axis before inserting the carriages in the unwinder, the two of said carriages being simultaneously present in the unwinder and being rotated approximately 180° with respect to each other.

53. (Canceled).

54. (Canceled).

55. (Currently Amended) ~~The plant as claimed in claim~~  
54, A plant for producing logs of web material, comprising in combination at least:

- a winder which receives at least one web material and produces large diameter reels by winding said web material around winding mandrels;

- at least one unwinder which unwinds said large diameter reels to provide unwound web material and which

feeds the unwound web material to a converting line;

- a plurality of carriages which transfer said large diameter reels with said mandrels from a loading station to said at least one unwinder, sustain said reels in the at least one unwinder during unwinding and convey the mandrels following unwinding to a predetermined area,

wherein said carriages comprise a locking device for locking the mandrels on which said web material is wound, and

wherein said locking device is combined with a rolling track on which said mandrels roll, the locking device retaining the mandrels in a predetermined position along said rolling track.

56. (Previously Presented) The plant as claimed in claim 55, wherein said rolling track slants with respect to horizontal, to permit rolling by gravity of the mandrels along the track.

57. (Previously Presented) The plant as claimed in claim 45, wherein a rolling track, on which said mandrels roll, is arranged to constitute an extension of the conveying guide for the reels in the loading station.

58. (Currently Amended) The plant as claimed in claim 55, wherein said locking device comprises, for each end of

the mandrels, a lever mechanism defining a seat for housing and retaining a corresponding end of a respective one of the mandrels, and ~~an~~ a first actuator to lock and release the mandrels by said lever mechanism.

59. (Previously Presented) The plant as claimed in claim 58, wherein said lever mechanism comprises a member defining said seat, sustained by an oscillating lever and a pair of levers hinged together.

60. (Currently Amended) The plant as claimed in claim 59, wherein said pair of levers is combined with ~~an~~ a second actuator which causes opening and closing of the pair of levers, said opening and closing causing oscillation of said oscillating lever and ~~an oscillation and/or translation movement~~ an oscillation movement, or a translation movement, or an oscillation and translation movement, of the member defining the seat for housing and retaining the end of the respective one of the mandrels, to perform functions of receiving the reels, lifting the reels from the rolling track and lowering the seat below the rolling track to permit unloading of the mandrels.

61. (Currently Amended) The plant as claimed in claim 60, wherein said second actuator is a cylinder-piston actuator.

62. (Currently Amended) The plant as claimed in claim 60, wherein said second actuator comprises a twin cylinder-piston system.

63. (Previously Presented) The plant as claimed in claim 62, wherein said oscillating lever is combined with a shock absorber.

64. (Previously Presented) The plant as claimed in claim 63, wherein an elastic member parallel to said shock absorber is combined therewith.

65. (Previously Presented) The plant as claimed in claim 59, wherein said oscillating lever and said pair of levers are arranged so that impact of one of said mandrels against said seat causes raising of the member defining the seat.

Claims 66-70 (Canceled).

71. (New) The plant as claimed in claim 50, further comprising a transfer device for transferring the reels with said mandrels from the winder to said carriages.

72. (New) The plant as claimed in claim 71, wherein said transfer device comprises a conveyor running between said winder and said loading station.

73. (New) The plant as claimed in claim 52, further comprising a transfer device for transferring the reels with



said mandrels from the winder to said carriages.

74. (New) The plant as claimed in claim 73, wherein said transfer device comprises a conveyor running between said winder and said loading station.

75. (New) The plant as claimed in claim 55, further comprising a transfer device for transferring the reels with said mandrels from the winder to said carriages.

76. (New) The plant as claimed in claim 75, wherein said transfer device comprises a conveyor running between said winder and said loading station.

77. (New) The plant as claimed in claim 75, wherein said rolling track slants with respect to horizontal, to permit rolling by gravity of the mandrels along the track.

78. (New) The plant as claimed in claim 76, wherein said rolling track slants with respect to horizontal, to permit rolling by gravity of the mandrels along the track.

79. (New) The plant as claimed in claim 75, wherein said locking device comprises, for each end of the mandrels, a lever mechanism defining a seat for housing and retaining a corresponding end of a respective one of the mandrels, and a first actuator to lock and release the mandrels by said lever mechanism.

80. (New) The plant as claimed in claim 76, wherein said locking device comprises, for each end of the mandrels, a lever mechanism defining a seat for housing and retaining a corresponding end of a respective one of the mandrels, and a first actuator to lock and release the mandrels by said lever mechanism.

81. (New) The plant as claimed in claim 79, wherein said lever mechanism comprises a member defining said seat, sustained by an oscillating lever and a pair of levers hinged together.

82. (New) The plant as claimed in claim 80, wherein said lever mechanism comprises a member defining said seat, sustained by an oscillating lever and a pair of levers hinged together.

83. (New) The plant as claimed in claim 81, wherein said pair of levers is combined with a second actuator which causes opening and closing of the pair of levers, said opening and closing causing oscillation of said oscillating lever and an oscillation movement, or a translation movement, or an oscillation and translation movement, of the member defining the seat for housing and retaining the end of the respective one of the mandrels, to perform functions of receiving the reels, lifting the reels from the rolling

track and lowering the seat below the rolling track to permit unloading of the mandrels.

84. (New) The plant as claimed in claim 82, wherein said pair of levers is combined with a second actuator which causes opening and closing of the pair of levers, said opening and closing causing oscillation of said oscillating lever and an oscillation movement, or a translation movement, or an oscillation and translation movement, of the member defining the seat for housing and retaining the end of the respective one of the mandrels, to perform functions of receiving the reels, lifting the reels from the rolling track and lowering the seat below the rolling track to permit unloading of the mandrels.

85. (New) The plant as claimed in claim 83, wherein said second actuator is a cylinder-piston actuator.

86. (New) The plant as claimed in claim 84, wherein said second actuator is a cylinder-piston actuator.

87. (New) The plant as claimed in claim 83, wherein said second actuator comprises a twin cylinder-piston system.

88. (New) The plant as claimed in claim 84, wherein said second actuator comprises a twin cylinder-piston system.

89. (New) The plant as claimed in claim 87, wherein said oscillating lever is combined with a shock absorber.

90. (New) The plant as claimed in claim 88, wherein said oscillating lever is combined with a shock absorber.

91. (New) The plant as claimed in claim 89, wherein an elastic member parallel to said shock absorber is combined therewith.

92. (New) The plant as claimed in claim 90, wherein an elastic member parallel to said shock absorber is combined therewith.

93. (New) The plant as claimed in claim 81, wherein said oscillating lever and said pair of levers are arranged so that impact of one of said mandrels against said seat causes raising of the member defining the seat.

94. (New) The plant as claimed in claim 82, wherein said oscillating lever and said pair of levers are arranged so that impact of one of said mandrels against said seat causes raising of the member defining the seat.